Cisco Evolved Programmable Network Manager 3.1 Release Notes

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Introduction

This document contains the following information about Cisco Evolved Programmable Network Manager 3.1:

Functionality Added in Cisco EPN Manager 3.1

This section lists the new features/functionality delivered in Cisco EPN Manager 3.1.

Note MTOSI support for EPNM has been deprecated from Cisco EPN Manager 3.1 onwards, please use RESTconf APIs for API integration.

Note Features marked “BETA” provide limited functionality in this release. The intention is to fully support these features in the next release.

GUI - General

- In service performance Top N End-point traffic, customer would like to add min/max columns.
- Configurable separator for reports and export.
- User Interface response time and performance benchmark.

- Service performance monitoring capabilities - Namely, C37.94, 4 Wire E&M, and Serial variants.
- Heartbeat polling feature at NE level for the supported protocols and raise system events, when any of them becomes unreachable.
- EPNM device console capability should provide audit trail capability.
- Cleanup job that does not require to run.

Device Configuration

- BETA: Add support in EPNM for IOS-XR 7.0.1 for the NCS560
- BETA: EPNM support of IOS-XR 7.0.1 on ASR9k
- BETA: EPNM support of IOS-XR 7.0.1 on Cisco NCS 540-24Z8Q2C-M Router
- BETA: EPNM support of IOS-XR 7.0.1 on NCS5500
- Limited Availability: EPNM Support for NCS 540X-12Z16G-SYS-(A|D) (12x1G SFP + 4x1G Cu + 12x10G) IOS-XR 7.0.1
- Limited Availability: EPNM Support for NCS 540X-16Z4G8Q2C-(A|D) (16x10G+ 4xCu+8x25G+2x100G) IOS-XR 7.0.1
- IOS XE 16.12.1 Validation on NCS4200
- IOS XE 16.12.1 Validation on ASR900
- Limited Availability: IOS XR 6.5.28 validation on NCS4K
- ME1200 3.24 validation
- EPNM Avoid long running Sync of given device
- For XR, when there is configuration commit error, EPNM should run ‘show configuration failed’ command
- EPNM Inventory - Quality Improvement
- Sync state indication.
- Copy and activate a port configuration from one port to a new port.
- Edit and retry a failed provisioning order - For CLI Template.
- Support for AINS Port state.
- BITS frequency/ BITS Interface should support line coding and line build out in MBC.
- 1+1 Electrical Protection: New timers support (Hold off Timers).
- Avoid continous sync - Ability to enable/disable Granular Inventory per device.
- EPNM should support Other(Windows native:ZipCrypto) zip encoding when exporting inventory as zip files.
- **Application of device manageability configuration profile.**
- EVC naming should reuse the EVC name on Service instance when available.
- NCS2k basic support for R11.1.

- Automatically and/or manually arrange for a replacement network element.
- IOS XE 16.12.1 Validation on ASR9XXU.
- EPNM - ISSU on NCS560-4 on IOS-XR 7.0.1.
- Management VRF interface support for Configuration Archiving.
- To be able to support 64 bit upgrade/SWIM for ASR9k.
- DB backup retry option for the NCS 2k.
- EPNM should support SWIM / SMU for Third party or Yocto packages for NCS5500.
- Restoring admin configuration for XR devices.

Installation

- License check for classic and smart ""Advanced"" licenses.
- EPNM Requirement to Support Bonding/ teaming to keep redundancy between Servers.
- At least 5 different NTP-Servers must be configurable.
- NBI, SBI, admin and internal communication segregated into different, virtual networks.

Circuit Emulation

- Circuit Emulation Service Types has been renamed as per standards in EPNM Provisioning Wizard.
- SDH Promotion and Reconciliation.
- CEM: Add missing DS1/DS3 and Sonet counters from SNMP mibs.
- UPSR/SNCP Admin functions: enable protection switching.
- Channelization configuration on DS3 interfaces upon circuit deletion behavior improvements.
- DS3 CEP mode support on the NCS 4200 provisioning.

Circuits/VCs - General

- NCS2k remote TXP configuration for OCH provisioning.
- NCS2k 11.1 support for 10 x 10G card with 400G-XP.
- NCS1004 PM collection full support.
- NCS1004: OCHTrail with 3rd party or no ROADMS.
- NCS2k device 360. Add action to resync conditions.
- EPNM To support Provisioning, Discovery, Fault, Assurance, Performance for Segment Routing.
- EPNM should support EVPN-VPWS service for Discovery, Provisioning , Assurance similar to other VPN services.
- C37.94 64kbps version.

- FlexLSP: EPN-M shall support the auto-bw keyword, SRLG diverse, Sticky and Non-revertive keywords.
- Save & Schedule Provisioning order: Handling UNI planning and planned versions.

Carrier Ethernet

- ME1200: Y.1564
- Validate Y.1731 with XR 6.5.28 on NCS4K
- Support Y.1564 testing with XR 6.5.26 (was 6.5.3) on NCS4K (loopback only)
- ME1200: Support for ""On Demand"" Y.1731
- Support/Validate LAG/Portchanel in the core.

L3VPN

- Association of route policy with on-demand color for L3VPN VRF.
- EPNM should support a larger number of VRFs (500 to start with).
- Improve the EPNM overlay presentation for HSRP with L3VPN.

Service - Assurance

- EPNM - OAM for Segment Routing.
- Enhancements made to time filtering mechanism in the Interfaces Performance Dashboard.
- New MPLS link dashboard added.
- New dashlets added for SONET/DS1/DS3 interfaces in the Sonet/TDM dashboard.
- Support for NCS1004 perfromance data.
- Support of Ethernet PCS counters for NCS 1004.
- Support BERT on Elboron card.
- Support for Y.1731 on-demand test & Y.1564 test on NCS4K XR 6.5.28.
- Support for "On Demand" Y.1731 for ME1200.
- Support for Y.1564 testing for ME1200.

Security

- CT1140: SEC-CRY-LOG: Log cryptographic connection setup and teardown.
- CT1564: SEC-LOG-ATTACK: Log indications of attack or abuse (SQL and LDAP injections).
- CT1665: SEC-WEB-RESP-3: Specify type and encoding in HTTP responses.
- CT477: SEC-SW-OPENCLOS: Identify open and closed execution spaces.

Segment Routing

- Support for provisioning of Segment Routing TE Policies on XR devices from Provisioning Wizard.
- Support for ODN policies provision through CLI templates
- Only user defined adjacent SID is supported, the auto allocated adjacent SID cannot be used for segment-list creation.

MPLS-TE

- Support for LSP Attribute list for Unidirectional tunnels.
- Support for creation of Bidirectional and Unidirectional tunnels over the LAG core.
- Support for Sticky and Non-revertive for Unidirectional tunnels and Bidirectional tunnels for XE devices.

Optical

- Enable Configuration tab of the chassis view of NCS5504.
- NCS2k port remains in service after fiber cut.
- Layer correlation on interface LINE-1-2-3-RX.
- EPN-M shall allow longer retention periods for 30s and 15m Optical PM.
- EPNM support for NCS4200-1T8S-20CS (NCS 4200 1x10G MR + 8-port Low Rate - 10G CEM, iMSG & OTN LC) XE 16.12.1.
- EPNM Chassis view support for Cisco CRS-1 8-Slot Line Card Chassis - OID:1.3.6.1.4.1.9.1.1658.
- EPNM chassis view support for Optics modules (shown below) w.r.t NCS55xx.
- NCS1004: Circuit provisioning with NCS2k ROADM.
- NCS1004: Circuit provisioning with NCS2k ROADM that requires electrical regeneration.
- NCS2k: Optical restoration with NCS1004.
- NCS1004: wavelength recolouring after restoration.
- NCS1004 ITU ports wavelengths settings on flex grid.
- NCS1004: OTU4 support on Client.
- NCS1004 gmpls uni / lmp configuration for OCH provisioning.
- NCS1004 slice configuration on chassis view.
- NCS4k: Template to configure squelch timing with idle (6.5.26).
- NCS1004: Topology Discovery via LMP.
- NCS2k R11.0 Regen support in no validation mode.
- NCS2k R11.0 test otdr scan on NCS2002.
- NCS540 Alarm Description is coming as ""null"" for optical interfaces.

Cable Technologies

- BETA: Support Reactive Inventory for Cable Utilization Dashboard.
- BETA: Cable Scale Testing for 3.1.
- BETA: CBR8 : Support Remote-PHY Compact Shelf [6 x 12] and [3 x 6].
- BETA: CBR8 : Support IOS-XE 16.12.1 for cBR-8 devices.
- BETA: Support New DPIC Card 2X100G introduced in the release
- BETA: Consume RPD traps real time from cBR-8, update RPD attributes and build correlation logic.
- BETA: cBR-8 Service Group Utilization: Capture cBR-8 DS/US Data & Video controller, associated profile and DEPI information in EPNM.
- BETA: CBR8 : Ability to get data related to RF health for all channels (SNR, FEC).
- Cable modem utilization on per modem basis.
- Hardware Root Cause Analysis (RCA) & Identify failed units on CBR8.
- Provide the option to integrate SmartPHY in Read-Only mode.
- CBR8 : Ability to capture the DOCSIS version of all modems on a node.
- BETA: CBR8 : Ability to monitor and raise alarm based on OFDM Profile Quality Metrics.
- BETA: CBR8 : Ability to get US RF metrics on a per RPD as well as per MAC Domain basis.
- BETA: CBR8 : Ability to show or filter by device type of modem.
- BETA: CBR8 : Show RPD events in EPNM and build basic correlation.
- BETA: cBR-8 Service Group Utilization.
- Add support for flap list trouble shooting across multiple CBR8 and provide consolidated view in dashlet.

Topology and Geo Map

- Improve the Overlay presentation for HSRP with L3VPN.
- Support a larger number of VRFs, up to 500.
- Support multiple virtual domains and user roles for Active Directory scenario.
- Support "Classic" and "Advanced" licenses.
- SR path visualization without SR-TE.
- Option to update Alarms and status on topology view every 30 seconds.
- Circuit/VC, Link and Alarm table export shall contain an additional default column containing the full path of the device group.
- [UH-VIZ:77] Topology to show only the devices containing alarms (and suppress the rest).

User Management Feature

- EPNM -The Number of concurrent UI users shall scale to a higher number.
- Support multiple virtual domains and user roles for Active Directory scenario.
- EPNM- Maximum number of parallel session for a User is restricted and configurable in the user profile.
- Auto-generated, initial user password (without admin knowing the password).
- Ability to kill an active session and log out that user.
- EPN-M: Harden oracle file access rights.

Fault Management

- EPNM- Services Alarm List.
- Raise an alarm when a configurable, maximum number of total user sessions has been exceeded.

RESTCONF NBI

- Support for provisioning L3VPN over SR-TE
- Include empty slot names in node/equipment data retrieval
- Support alarm notifications to filter by node fdn, cause type and probable cause
- Support termination point directionality with source(A end) and sink(Z end) designation in VC data retrieval
- Support for using path constraints in OCH Trail UNI Provisioning
- Support for audit logging of all Restconf NBI and provide a new API to retrieve the audit log information.
- API to Re-synchronize a Circuit/VC
- Support Provisioning and Notifications for Segment Routing Service
- Support Provisioning, Retrieval and Notifications for EVPN-VPW Service
- Support for service impacting information in alarm data in both alarm retrieval and notification
- Support for edit and retry a failed CLI Template execution
- Support for AINS Port configuration
- Changes in SDH/Sonet Terminology for service sub-type in SDH/Sonet provisioning and retrieval
- Support DS3 CEP mode on the NCS 4200 provisioning
- Support for classic and advanced license validation in NBI Authorization
- Support service promotion of SDH services.
- Support Regen constraints and restore alternate configurations in SSON and WSON circuits provisioning
- Support lock down, sticky, srlg and non-revertive configuration for working , protected and restore paths for MPLS TE tunnel provisioning

- BETA: supported saving a service provisioning request to be used in deploying the same at later point in time.

Note

- In TP retrieval (get single or get all), the termiation-point(TP) data retrieved does not include some attributes that are not applicable based on the layerrate of the TP being retrieved.
- For Optical Ethernet TP on DWDM devices (e.g. NCS2k), the layerrate values are changed to follow packet ethernet TP layerrate value naming convention - for example, the lr-dsr-100gigabit-ethernet is chaged to lr-hundred-gigabit-ethernet. Example for full FDN for Optical Ethenet TP is "MD=CISCO_EPNM!ND=cvg-bos-hqg-10.cisco.com!CTP-name=HundredGigECtrl0/0/2!=Hundredgigabitethernet". Example for get TP by ethernet layerrate is "https://<host>/restconf/data/v1/cisco-resource-em:termination-point?layerRate=lr-hundred-gigabit-ethernet".
- TP instances with layerrate values that contains "lr-dsr-*-ethernet" do not carry useful information and should be ignored.

MTOSI NBI

- MTOSI NBI is deprecated and disabled. OSS integration users looking for Northbound APIs, RESTCONF NBI should be used.

Device/OS Support Added in Cisco EPN Manager 3.1

This section lists the new support provided in Cisco EPN Manager 3.1. For a list of all support information, click the gear icon at the top right of the web GUI and choose Help > Supported Devices.

Note "BETA" means that the device/operating system has not yet been released but Cisco EPN Manager has been tested on the Beta version.

Cisco ASR 9000 Series Aggregation Services Routers—New Operating System Support

Device Model	Device OS
Cisco ASR 9001	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9006	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9010	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9904	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9906	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9910	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)

Device Model	Device OS
Cisco ASR 9912	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9922	IOS-XR 6.5.2, IOS-XR 7.0.1 (BETA)
Cisco ASR 9901	IOS-XR 6.6.1, IOS-XR 7.0.1 (BETA)

Cisco Network Convergence Systems 5500 Series—New Operating System Support

Device Model	Device OS
Cisco NCS 5501	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 5501-SE	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 5502	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 5502-SE	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 5508	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 5516	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 5504	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 55A2-MOD-S	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 55A2-MOD-HD-S	IOS-XR 6.5.2, 6.6.1, IOS-XR 7.0.1 (BETA)
Cisco NCS 55A1-36H-SE-S	IOS-XR 6.3.2 (BETA), IOS-XR 7.0.1 (BETA)

Cisco Network Convergence Systems 4000 Series—New Operating System Support

Device Model	Device OS
Cisco NCS 4009	IOS-XR 6.5.28 (BETA)
Cisco NCS 4016	IOS-XR 6.5.28 (BETA)

Cisco Network Convergence Systems 540 Series Routers—New Operating System Support

Device Model	Device OS
Cisco NCS 540 24Z8Q2C M Router	IOS-XR 6.6.25, IOS-XR 7.0.1 (BETA)
Cisco NCS 540-ACC-SYS	IOS-XR 6.6.25, IOS-XR 7.0.1 (BETA)
Cisco NCS 540X-ACC-SYS	IOS-XR 6.6.25, IOS-XR 7.0.1 (BETA)

Cisco Network Convergence Systems 540L Series Routers—New Operating System Support

Device Model	Device OS
NCS 540X-12Z16G-SYS-(A|D)	IOS-XR 7.0.1 (LA)
NCS 540X-16Z4G8Q2C-(A|D)	IOS-XR 7.0.1 (LA)

Cisco Network Convergence Systems 6000 Series Routers—New Operating System Support

Device Model	Device OS
Cisco NCS 6000 IOS-XR 6.4.1, stand alone	IOS-XR 6.4.1, stand alone IOS-XR 6.4.1, with single chassis multi SDR IOS-XR 6.4.1 (BETA), with multi chassis multi SDR

Cisco Network Convergence Systems 560 Series Routers—New Operating System Support

Device Model	Device OS
Cisco NCS 560 Router	IOS-XR 6.6.25, IOS-XR 7.0.1 (BETA)
Cisco NCS 560-4 Router	IOS-XR 6.6.25, IOS-XR 7.0.1 (BETA)
Cisco NCS 560-4 Enhanced Router	IOS-XR 6.6.25, IOS-XR 7.0.1 (BETA)

Cisco ASR 900U & ASR 920U Series Aggregation Services Routers—New Operating System Support

Device Model	Device OS
Cisco ASR 902U Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 903U Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920U-12SZ-IM Router	IOS-XE 16.11.1a, IOS-XE 16.12.1

Cisco ASR 900 Series Aggregation Services Routers—New Operating System Support

Device Model Device OS	Device OS
Cisco ASR 920 Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 24SZ IM Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 24TZ M Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 24SZ M Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 12SZ IM Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 4S ZD Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 8S Z0A Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 12 CZA Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 12 CZ D Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 4S ZA Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 10S ZPD Router	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco ASR 920 20SZ M Router	IOS-XE 16.11.1a, IOS-XE 16.12.1

Cisco NCS 4200 Network Convergence Systems—New Operating System Support

Device Model	Device OS
Cisco NCS 4201	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco NCS 4202	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco NCS 4206	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco NCS 4216	IOS-XE 16.11.1a, IOS-XE 16.12.1
Cisco NCS 4216 F2B	IOS-XE 16.11.1a, IOS-XE 16.12.1

Cisco NCS 1000 Series Network Convergence Systems—New Operating System Support

Device Model	Device OS
Cisco NCS 1001	IOS-XR 6.5.2
Cisco NCS 1002	IOS-XR 6.5.2

Cisco NCS 2000 Series Network Convergence Systems—New Operating System Support

Device Model	Device OS
Cisco NCS 2000	Release 11.0, Release 11.1

Cisco ONS 15454 Series Multiservice Provisioning Platforms—New Operating System Support

Device Model	Device OS
Cisco ONS 15454	Release 11.0, Release 11.1

Cisco ME 1200 Series Carrier Ethernet Access Devices—New Operating System Support

Device Model	Device OS
Cisco ME 1200-4S-A	IOS 15.6-7.SN1

Cisco Industrial Ethernet 1000 Series Switches—New Operating System Support

Device Model	Device OS
Cisco IE 1000-8P2S-LM Industrial Ethernet Switch	IOS 1.6 (BETA)

Supported Installation/Upgrade Paths

The following table lists the valid paths for installing/upgrading to Cisco EPN Manager 3.1 from previous versions.

Current Cisco EPN Manager Version	Upgrade Path to Cisco EPN Manager 3.1
Cisco EPN Manager 3.0	**Cisco EPN Manager 3.0 > 3.1**
Cisco EPN Manager 3.0.1	**Cisco EPN Manager 3.0.1 > 3.1**
Cisco EPN Manager 3.0.2	**Cisco EPN Manager 3.0.2 > 3.1**

See the relevant installation guide for installation prerequisites and procedures for Cisco EPN Manager versions.

For point patch installation instructions, see the readme file supplied with the patch file on the on the Software Download site on Cisco.com.

Important Notes

Upgrade Issues

After upgrading to Cisco EPN Manager 3.0.0:

- FTP and TPTP will be disabled by default after installing the maintenance pack.
- Active threshold crossing alarms (TCA) for temperature will remain active and will not be cleared. Please clear these alarms manually.
- Devices must be resynced in order to view ISIS links and ISIS LTPS.
- LDP-enabled devices must be resynced in order to view LDP feature-related information.
- TCAs for inbound/outbound errors and inbound/outbound discards must be recreated in the Interface Health monitoring policy.

Note Mixed AUG configurations are not supported in EPNM.

Note Matlab processes have been removed from EPNM, starting Release 2.2.1.

TLS 1.2 Required for Secured Channel Communication for HTTPS and TLS

Only Transport Layer Security (TLS) 1.2 is supported for HTTPS and TLS related secured communication, for example, RADIUS EAP-TLS. Support for TLS 1.0, TLS 1.1, and all versions of SSL has been disabled due to security vulnerabilities.

This means that all peer systems and clients that transact with Cisco EPN Manager using HTTPS/TLS must support TLS 1.2. If they do not support TLS 1.2, they must be upgraded. Wherever possible, the Cisco EPN Manager documentation highlights the potentially affected systems. Please contact your Cisco representative for support in this regard, if necessary.

Reconciliation Report Limitations

When provisioning a service, if you have not provided a value for any of the attributes, the provisioned value for those attributes will be displayed as “Missing” in the reconciliation report. The device may have default values for these attributes but Cisco EPN Manager does not have any values configured.

Limitations on ME 1200 Devices

The Y.1564 performance test does not work if the source/destination is a ME 1200 device.

Limitations on NCS 4200 Devices Running IOS-XE 16.8.1

The following functionality does not work on NCS 4200 devices running IOS-XE 16.8.1:

- Alarm profile
- Configuration of SONET LOP and CT3 LOP from the GUI
- Admin shut/no shut functionality on SONET/T1/T3 HOP/LOP

Limitations on NCS540 and NCS5500 devices

- NCS540 device series does not support Bidirectional tunnel functionality.
- NCS540 device series does not support Fault-OAM, Wrap-Protection and BFD.
- NCS5500 device series does not support Fault-OAM, Wrap-Protection and BFD.

Limitations on IoT Devices Running IOS-XE 16.9.1

Following are the limitations on IoT devices running IOS-XE 16.9.1:

- RS422 and RS485 works on ports from 0 to 7 only.
- RS232 synchronous mode works on ports 8-13 only.
- If any one of the ports in 0, 1, 2 and 3 is configured with type TO or any other type, then all the four ports 0, 1, 2 and 3 will be automatically configured with the same type.
- If any one of the ports in 4 and 5 is configured with type TO or any other type, then the two ports 4 and 5 will be automatically configured with the same type.

Use CLI Templates for Configuring VRF Based BGP Address Families on XR

Use CLI Templates for configuring any BGP VRF Address families on XR, as there are known issues while configuring the same via Config UI.

Use CLI Templates for Configuring Static Routes

Use CLI Templates for configuring any static routes, as there are known issues while configuring the same via Config UI.

Use CLI Templates for Configuring PTP Commands

On ASR920 devices with software version 16.9.1, IEEE 1588-2008 BC/MC license is required to execute the 1588 PTP commands.

Configuration and Inventory Not Supported for PTP Templates

The behavior of modeling the configurations pushed through PTP templates may not work as expected because the model may not be in place for all the configurations pushed through PTP templates. Configuration/Inventory is not supported for these configurations.

Circuit Emulation

Promotion and Reconciliation functionality not supported for services over SDH controller.

EIGRP and RIP Not Supported

As of Cisco EPN Manager 2.2.1, EIGRP and RIP inventory and configuration support has been discontinued.

Deprecation of Support for ONS 10.00.10, 10.01.00, 10.03.00

No Support for ONS 10.00.10, 10.01.00, 10.03.00 ONS 10.00.10, 10.01.00, and 10.03.00 are no longer supported on Cisco NCS 2002, 2006 and 2015 devices.

Data Center Device Lifecycle Support Only

Cisco EPN Manager provides foundation lifecycle support for UCS compute systems, CSR 1000v, and Nexus series devices but does not provide data center topology.

LINK_DOWN alarm on sub interfaces in Gig Port

LINK_DOWN alarms will not be generated when link is down on sub interfaces in Gig Port.

Cisco EPN Manager Bugs

Open Bugs

The table below lists the open bugs in Cisco EPN Manager Release 3.1 according to the following criteria:

- Severity 1, 2, and high priority severity 3 open bugs
- All open customer-found bugs
- High-impact bugs that are likely to affect Cisco EPN Manager workflows.

Click the identifier link to view the impact and workaround for the bug in the Bug Search Tool. Use this tool to track the status of the open bugs.

Bugs	Description

Bugs	Description
CSCvq38842	EtesianDPP-NCS560/540 ASR9k-Repetitions in SNMP response for IPSLA OIDs-IPSLA polling stopped workin
CSCvm76771	[SVSPE-570]-Alarm tab is showing show facility-condition alarms for celeborn cards
CSCvq71460	Simulated node aborts when protected OCH circuit with regen constraints on restoration protect path
CSCvq71699	MLT overlay of EVPL not functioning properly when timestamp is not part of CLI response for NCS5508
CSCvq41494	Traditional license count should state "Chassis count" instead "Device count"
CSCvq94617	SysLog watcher dashlet is not displaying any syslog entries
CSCvq95328	A9K-40GE-SE shows port in opposite order and icons are too big
CSCvr00343	'ip sla' commands pushed during UC2 modify service in upgrade setup (3.0.1 to 3.1 - i92)
CSCvq13746	EPN - OTDR Scan - cannot stop scheduled scan it restarts
CSCvq93634	Two OCH Trail UNI use the same service id
CSCvq95099	collectionDetail value is not shown properly
CSCvq98506	Get Restconf termination-point type=FTP not showing all data
CSCvn44720	[HA] Invalid ERROR message is displayed on service restart post failover
CSCvq80392	Pari Engine is not restarted after failback
CSCvq68037	L3VPN-Modify:- Delete Endpoint order in EPNM is failing after doing Edit attribute
CSCvr00242	Labels checkbox is not enabled by default after performing upgrade from 3.0.2 -> 3.1
CSCvq90714	SR Path is not working properly with NV cluster device
CSCvq88782	Map and groups data is unavailable when Login with a system monitoring user on the first time
CSCvq70203	L3VPN:- Template association to the circuit is getting removed after Modify VPN
CSCvq74513	MPLSTE - Incorrect loopback in MPLSTETUNNELSETTINGS table causing promotion and prov issues
CSCvq76319	MPLS TE - Not able to remove the LSP attribute list from restore path
CSCvp52977	Deploy template is successful on the device for hostname but job result failed
CSCvr01772	10.104.120.210 NCS 42xx 16.12.1 fc4 device taking approx. 1 min 40 seconds for write mem
CSCvq96799	L3VPN:- EPNM upgrade from 3.0 to 3.1 is not removing template variable
CSCvq38842	NCS560/540 ASR9k-Repetitions in SNMP response for IPSLA OIDs-IPSLA polling stopped working

Bugs	Description
CSCvq38611	In Portgroups, no need to have Dynamic condition as compulsory
CSCvr10574	MPLS TE - Unidirectional tunnel promotion fails when collect-bw is configured

Platform Bugs	Description
CSCvq40719	PSU data is missing in Device Details page for Big Bend(NCS540I) devices.
CSCvq77914	entSensorType for interface Power Sensor displayed as unknown in snmp table
CSCvq76242	Bigbend: entSensorPrecision table returns 0 for power/temp/current sensors of optics

Resolved Bugs

The table below lists bugs that were listed as open bugs in the Cisco EPN Manager 3.0.0 release notes that have been resolved in Cisco EPN Manager 3.1.

For more information about the resolved bugs, go to the Bug Search Tool.

Identifier	Description
CSCvf37999	North bound server down alarms shows PI not EPNM
CSCvo47025	From MBC , delete of recovered clock configured on SDH AU-4 is failing
CSCvo45163	EPNM - Configuration tab to be renamed as Logical View
CSCvo09417	Etesian-I81: Y1564-issues with Packet size 1518 and 9216 bytes
CSCvo20327	Failed Bits-Interface configuration on device shown as successful in EPNM
CSCvo44109	Deletion of Network mask under the BGP Address family is failing
CSCvo43250	physical controllers HOP details not getting cleared after deleting aps
CSCvo39920	EPNM - Inventory collection failure - Unable to process MPLS LDP commands
CSCvo33280	IPSLA issue in Modify L3VPN
CSCvo28401	Bits-Interface and Bits Frequency configs not populated in MBC after GI

Identifier	Description
CSCvo07683	CEM-For SDH STM4/STM16 services HOP's which are configured with mode vc4 are listing, deploy failing
CSCvn82402	Vertical scale validation- getL2TransportIntSettings collection time issue for XE
CSCvg32453	STP associated interface is not listed on STP Instance ID
CSCvn40056	Alarms, interfaces and interfaces status are not listing for EM and C3794 Module in chassis view.
CSCvn72360	C3794ProtocolEndpoint is not getting created due to C3794 controller naming issue.
CSCvo32160	Two devices had the same engine id in EPNM, causing SNMP connectivity failures
CSCvo26613	Imported location details get lost in few hours
CSCvo47135	Epnm-IoT: Edit and delete options for serial interfaces are not functional
CSCvo31309	GI is not working for CFM CCM check interval when changed through CLI in the upgrade server
CSCvo25902	EPNM deletes the default route that does't appear in EPNM GUI while adding new routes to XE devices
CSCvo32160	Two devices had the same engine id in EPNM, causing SNMP connectivity failures
CSCvo43250	physical controllers HOP details not getting cleared after deleting aps
CSCvo49149	for non-root admin user, on trying to edit any hop in HOP page, drools execution going in loop
CSCvo50405	For non-root user, drop down Rate box is not working fine on physical controller.
CSCvo50695	Cannot create BITS-Interface in non-root admin user. End up getting "Server 500" error.
CSCvo50715	Cannot add Bits Clock Settings in non-root admin user, Stray popup message appears.
CSCvo57597	cem t3 service with sonet endpoints and with acr/dcr clock, goes partial after modify clock
CSCvo26613	Imported location details get lost in few hours
CSCvo48453	CEM-For STS-1 service creation HOP pre-configured with 'mode unframed' is not listing
CSCvo18777	Layer 3 link - BGP neighbor is not negated in the delete flow for XR devices

Identifier	Description
CSCvo16854	Layer 3 link - ISIS force delete issues
CSCvo16541	Layer 3 link - Force delete failed for BGP enabled Layer3 link
CSCvo16527	Layer3 Link - Force delete failed for Port based OSPF enabled Layer3 link
CSCvo35600	ASR9K Completed With Warning issue - feature-l3vpn-bgp error
CSCvo13224	L3Link - Force delete failed for Vlan based OSPF enabled Layer3 link on XR devices
CSCvo15330	clear isis,ldp,bgp,link_down,pw,cefc(power/module) somtm followed by a raise (end result is correct)
CSCvo58529	Schedule archive for database configuration doesn't work NCS4K
CSCvn72041	Bad FAN and RAID alarms seen after EPNM 2.2.1 installation on UCS C220 M5SX
CSCvn72674	I80A - Data cleanup job stuck in running post EPNM startup
CSCvq98114	EVENT_BURST_DETECTED event not generated for the same device, after first detection

Closed Bugs

The table below lists the closed bugs in Cisco EPN Manager Release 3.1.

Click the identifier link to view the impact and workaround for the bug in the Bug Search Tool. Use this tool to track the status of the open bugs.

Bugs	Description
CSCvq72034	NEReplacement: Device in SNMP Connectivity failed while moving it managed just after NE replacement.

Get Information about Cisco EPN Manager Bugs

Use the Bug Search tool (BST) to get the latest information about Cisco EPN Manager bugs. BST allows partners and customers to search for software bugs based on product, release, and keyword, and it aggregates key data such as bug details, product, and version.

Cisco EPN Manager bugs may be caused by defects in a device's platform or operating system. In those cases, the Cisco EPN Manager bug will be resolved when the hardware/operating system bug is resolved.

Procedure

Step 1 Log into the Bug Search Tool.

a) Go to https://tools.cisco.com/bugsearch/.

b) At the Log In screen, enter your registered Cisco.com username and password; then, click **Log In**

Note If you do not have a Cisco.com username and password, you can register for them at http://tools.cisco.com/RPF/register/register.do

Step 2 To list all bugs for this version, click the Select from list hyperlink that is next to the Product field and select the product.

a) Choose **Cloud and Systems Management** > **Routing and Switching Management** > **Cisco Evolved Programmable Network (EPN) Manager** and then select the required product version.

b) When the results are displayed, use the filter and sort tools to find bugs according to their status, severity, how recently they were modified, if any support cases are associated with them, and so forth.

You can also search using bug IDs or keywords. For more information, click **Help** at the top right of the Bug Search page.

Related Documentation

For a list of all documentation available for Cisco EPN Manager 3.1, see the Cisco Evolved Programmable Network Manager 3.1 Documentation Overview. The documentation overview also lists several Cisco Prime Infrastructure documents because the content of those documents is relevant to Cisco EPN Manager 3.1.

Accessibility Features in Cisco EPN Manager 3.1

For a list of accessibility features in Cisco EPN Manager 3.1, please contact accessibility@cisco.com.

All product documents are accessible. If you would like to receive the product documentation in audio format, braille, or large print, contact accessibility@cisco.com

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see What's New in Cisco Product Documentation

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